

Claims

1. A water-dispersible liquid vitamin composition comprising:

a) from 40% to 90% by weight of a vitamin component selected from the group

5 consisting of:

(i) one or more precursors of Vitamin A;

(ii) one or more precursors of Vitamin E;

(iii) a mixture of one or more precursors of Vitamin A and one or more
precursors of Vitamin E;

10 (iv) a mixture of one or more precursors of Vitamin A and Vitamin D3;

(v) a mixture of one or more precursors of Vitamin E and Vitamin D3; and

(vi) a mixture of one or more precursors of Vitamin A, one or more
precursors of Vitamin E, and Vitamin D3;

b) from 2% to 10% of a C1 to C6 alkyl lactate;

15 c) from 0% to 10 % of a C2 to C6 mono-hydroxy alcohol;

d) from 5% to 50% of a one or more veterinarily acceptable emulsifiers; and

e) from 1% to 12% of an oil;

wherein the composition is substantially free of water.

2. The composition of Claim 1, wherein said composition further comprises

20 from 0% to 5% of a stabilizer.

3. The composition of claim 1, wherein said composition comprises said alkyl
lactate and said mono-hydroxy alcohol and the ratio of the alkyl lactate to the mono-
hydroxy alcohol is from 1:1 to 3:1.

4. The composition of claim 3, wherein the ratio of b) to c) is from 1.5:1 to 2.8:1.

5. The composition of claim 1, wherein the C2-C6 mono-hydroxy alcohol is present in an amount from 2% to 5%.

5 6. The composition of claim 1, wherein the emulsifier is a non-ionic surfactant.

7. The composition of claim 1, wherein the viscosity of the composition is from 1000 cP to 10000 cP at 0 degrees C.

8. The composition of claim 1, wherein said composition adequately disperses into water within 2 minutes when added at a ratio of composition to water of from 1 g/kg to 100 g/kg.

9. The composition of claim 1, wherein said composition adequately disperses into water within 20 seconds when added at a ratio of composition to water of from 1 g/kg to 100 g/kg.

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